

Research Centre for Health (ReaCH)



Improving health and wellbeing for all

August 2021

Welcome to the August issue of the Research Centre for Health (ReaCH) newsletter highlighting the latest research from the School of Health and Life Sciences at Glasgow Caledonian University (GCU).

This month's newsletter showcases work from across the School's talented research community from our doctoral student, Ross Kincaid's success in receiving an award in recognition of his research communication at an international conference, to the contribution of some of our research leaders working in sexual health and blood borne viruses, and in falls prevention. It is clear, however, when you follow up on the links that all of these great achievements are built by teams across not only the academic world, but also policy makers, service users, other academics and clinical teams. Furthermore it is the partnership working with industry and government, that would realise any changes needed to promote healthier lifestyle interventions such as the example that Dr Elena Dimova refers to in her podcast (a sobering listen indeed).



Our newsletter is also looking forwards to fantastic new opportunities for research, for example with one of the few SafePods to be made available in Scotland by the Economic and Social Research Council (ESRC). This investment will support our ambition to use data to refine and address health questions safely and securely, and will support collaboration across disciplines including data sciences and partnerships with other Universities.

We are always keen to hear of your successes and to share these in our newsletter and so do get in touch. I would encourage you to follow up on the links in the newsletter – as we are mostly still remote working so do use these links to build your networks and familiarise yourself with some of our fantastic research.

Find our more about our research on our website www.gcu.ac.uk/reach or follow us on twitter



Professor Andrea Nelson, Pro Vice-Chancellor Research and Director of ReaCH

Scientists reveal blueprint for getting hepatitis C treatment to people who inject drugs



Scientists have revealed a new method of delivering hepatitis C testing and treatment to people who inject drugs which will help bring the world a step closer to eliminating the virus. A team of experts led by GCU and the University of Bristol, in collaboration with NHS Tayside and the Scottish Drugs Forum (SDF), have published a 'game-changing' blueprint on how best to get hepatitis C treatment to those who need it most after a successful three-year trial in NHS Tayside. The breakthrough in getting treatment to those who inject drugs - studied as part of the National Institute for Health Research (NIHR) funded EPIToPE (Evaluating the population impact of hepatitis C direct-acting antiviral treatment as prevention for PWID (people who inject drugs)) project will help guide efforts in Scotland to eliminate hepatitis C by 2024. The EPIToPE study is co-led by Professor Sharon Hutchinson and researchers Professor Lawrie Elliott and Dr Gabriele Vojt, of the Sexual Health and Blood Borne Viruses Research Group.

Read more

Ageing expert behind new data predicting falls rise in older people as result of COVID-19 lockdown

GCU Professor in Ageing and Health Dawn Skelton was one of the experts behind new data predicting that the number of falls among older adults could increase due to a decline in balance and muscle strength caused by inactivity during the first lockdown. The report 'Wider Impacts of COVID-19 on Physical Activity, Deconditioning and Falls in Older Adults' has just been published by Public Health England. Professor Skelton is a member of the National Falls Prevention Coordination Group (NFPCG) and was on the advisory group for the report, giving her guidance and advice throughout.



Read more



New SafePod arrives at GCU

GCU is one of the first in Scotland and the UK to clinch a new SafePod providing staff with remote access to sensitive or confidential datasets for research purposes for the very first time. The SafePod has been installed on the ground floor of the Sir Alex Ferguson Library and is expected to be up and running later this month. Designed and developed at the University of St Andrews, a SafePod is designed to replicate a traditional safe setting and includes security features such as door control access system, CCTV camera and secure storage areas for IT hardware and equipment. Professor Sebastien Chastin worked closely with former Assistant Vice Principal, Research Excellence Professor Jim Woodburn to secure a SafePod for GCU and Professor Martijn Steultjens is managing the facility.

Read more

Best clinical abstract award for Prolong20+ study

A conference abstract reporting the first findings of the Prolong20+ study has been awarded the best clinical abstract. Professor Suzanne Hagen of the Ageing Well Research Group will present the paper 'Pelvic floor dysfunction 26 years after childbirth: a longitudinal study' to the online International Continence Society conference on 15th October.



Why Scotland needs mandatory health warnings on alcohol products

Dr Elena Dimova of the Substance Use Research Group joins the latest episode of the Common Good Podcast to talk about how alcohol labelling using negative health warnings, similar to that on cigarette packets, could help people change their drinking habits. Dr Dimova outlines the issues surrounding excessive alcohol consumption and how mandatory health warnings can encourage the public to drink less. She also discusses the challenges of tackling Scotland's drinking culture.

Read more

Major international accolade for sexual health and blood borne viruses PhD student

A GCU sexual health and blood borne viruses doctoral student has won a prestigious American STD Association (ASTDA) Award for his research presentation at a world wide conference. Congratulations to Ross Kincaid, who is supervised by Professor Claudia Estcourt, Dr Jamie Frankis, Dr Jenny Dalrymple and Dr Jo Gibbs. Ross' poster was entitled Do GBMSM's preferences for the modality of their sexual healthcare vary according to health concerns and symptoms? A cross-sectional survey and the data came from his doctoral research. His research aims to establish an evidence base to help inform the development and implementation of an online HIV pre-exposure prophylaxis (PrEP) service with a focus on gay, bisexual, and other men who have sex with men in Scotland.



Read more



GCU Honorary Professor Nicola Steedman clinches top government health job

Congratulations to GCU Honorary Professor Nicola Steedman who has just been appointed Deputy Chief Medical Officer (DCMO) by the Scottish Government. Professor Steedman was already in place as interim DCMO on a temporary basis. She takes up her post with immediate effect. Professor Steedman has close research links with the Sexual Health and Blood Borne Viruses Research Group and is a key part of Professor Claudia Estcourt's HIV prevention programme. She is also championed GCU Professors Sharon Hutchinson and David Goldberg's Hepatitis C epidemiology research as part of Scotland's Hepatitis C elimination strategy.

Read more

Falls Prevention - evidence into practice with the FLEXI Implementation Study

Professor Dawn Skelton of the Ageing Well Research Group along with colleagues in Nottingham, Manchester and Exeter have secured funding to look at a rolling out evidence based falls prevention programmes with health, charity and sport partners. Refining, and updating with reference to COVID-19 and potential increased need, an Implementation Toolkit the group have previously produced builds on FaME, a programme recommended by Public Health England for cost-effective commissioning and GCUs involvement in the implementation of FaME for larger reach and impact. Read more about the FLEXI Study, one of only 3 studies funded in the recent NIHR Healthy Ageing, Dementia and Frailty National Priority Research Programme via the link below.

Read more



Hear more about the latest findings from the NIHR funded Limiting Undetected Sexually Transmitted Infections to Reduce Morbidity (LUSTRUM) programme trial led by Professor Claudia Estcourt, Sexual Health and Blood Borne Viruses Research Group. LUSTRUM aims to improve the sexual health of heterosexual people and men who have sex with men (MSM). The programme aims to achieve this by preventing transmission of sexually transmitted infections (STIs) and reducing undiagnosed HIV. This five year mixed methods programme unites multidisciplinary experts from eight academic and NHS institutions.

Read more

Health Services Research UK

ReaCH has recently became a member of the Health Services Research UK network. They provide members with a wide range of information, support, networking and professional development opportunities. Some of these include:

- Significantly discounted registration to our annual health services research conference, for all your team
- Attend regular events, including invitations to special members-only seminars and roundtables and discounts for your team
- Opportunities to take part in our new career development mentoring programme
- Connect with the right people for your needs, whether you're working in research, policy or practice
- Get involved in shaping our national work programme and help raise the profile of health services research
- Keep informed about the latest health services research news, consultations and opportunities
- Get members-only e-newsletters
- Briefings and digests on key issues and landmark evidence

We can also include information on their website or within their newsletter about our research, job vacancies or other opportunities and they will also share/repost tweets through their social media accounts. For more details about the network, please click on the link below.

Read more



Find out the latest news from the Nursing, Midwifery and Allied Health Professions Research Unit (NMAHP-RU) in the July issue of their newsletter.

Read more

Conferences and public engagement

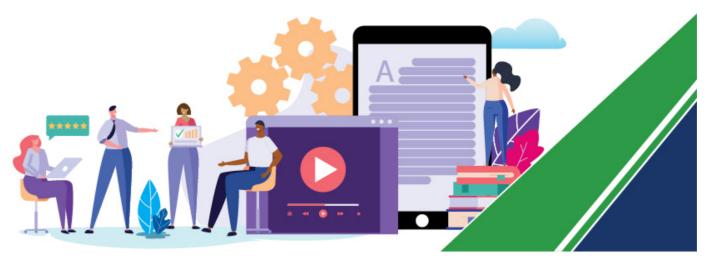
Dr Yvonne Dempsie of the Molecular Mechanisms of Long-Term Conditions Research Group is presenting at the British Pharmacology Society meeting September 2021 in the session 'Innovations in Pharmacology Education and Engagement'. This public engagement session is entitled 'From craft-making drugs to discussing LSD in pubs....engaging the public with Pharmacology'. Likewise, Dr Mark Williams and Katie Miari will also be presenting on elements in the bone marrow that can influence therapy resistance in specific types of cancer. Dr Dempsie is also presenting at the Glasgow Science Festival at the Botanics: Glasgow Connects' event and will be running the 'Medicine Makers' activity to engage the public with Pharmacology.

Read more



In 2017 GCU hosted the International Gap Junction Conference in Glasgow. These biannual events attract delegates from around the world to discuss aspects of the role of Connexins and Pannexins in Health and Disease. The 2022 meeting will be hosted by Dr Maria Mayan and colleagues in A Corona, Spain in summer 2022. In Glasgow there are focused research groups on connexin and pannexin research activities and we hold joint events to enable research students to exchange ideas and methodologies. As such and as part of our ReaCH activities we would like to invite Dr Maria Mayan as a guest seminar speaker to join a Research Day for students across Glasgow engaged in Connexin and Pannexin research. The event will be open to all PhD, MRes and MSc students and academic staff. The title of Dr Mayan talk will be 'New strategies to increase the efficacy of targeted pro-senescence therapies in metastatic cancer'. Dr Patricia Martin has been awarded funds by the Biochemical Society to host this meeting.

Read more



Recent publications

The latest publications along with GCU staff involved are listed below and to view the article, please click on the title.

'Evaluation of the scale-up of HIV testing among people who inject drugs in Scotland in the context of the ongoing HIV outbreak' in the International Journal of Drug Policy. Co-authored by Dr Kristen Trayner, Dr Norah Palmateer, Dr Andrew McAuley, Professor David Goldberg and Professor Sharon Hutchinson.

'The uptake of foil from needle and syringe provision services and its role in smoking or snorting heroin among people who inject drugs in Scotland' in the International Journal of Drug Policy. Co-authored by Professor Sharon Hutchinson, Dr Norah Palmateer, Professor David Goldberg and Dr Andrew McAuley.

'National population prevalence of antibodies to SARS-CoV-2 amongst pregnant women in Scotland during the second wave of the COVID-19 pandemic: a prospective national sero-survey' in the Journal of Public Health. Co-authored by Dr Andrew McAuley and Dr Norah Palmateer.

'Making a home: an occupational perspective on sustaining tenancies following homelessness' in the Journal of Housing Studies. Co-authored by Dr Katrina Bannigan.

'Longitudinal Analysis of the UK COVID-19 Psychological Wellbeing Study: Trajectories of Anxiety, Depression and COVID-19-Related Stress Symptomology' in Psychiatry Research. Co-authored by Dr Kerri McPherson, Dr Kareena McAloney-Kocaman and Pia Faeth.

'Urban blue spaces and human health: A systematic review and meta-analysis of quantitative studies' in Cities. Co-authored by Niamh Smith, Michail Georgiou, Professor Stephen Webb and Professor Sebastien Chastin. 'Epidemiology of healthcare-associated infection reported from a hospital-wide incidence study: considerations for infection prevention and control planning' in the Journal of Hospital Infection. Co-authored by Sally Stewart, Lynne Haahr, Dr Sarkis Manoukian, Professor Helen Mason and Professor Jacqui Reilly.

'Impact of healthcare-associated infection on length of stay' in the Journal of Hospital Infection. Co-authored by Sally Stewart, Lynne Haahr, Dr Sarkis Manoukian, Professor Helen Mason and Professor Jacqui Reilly.

'Personalized infection prevention and control: identifying patients at risk of healthcare-associated infection' in the Journal of Hospital Infection. Co-authored by Sally Stewart, Lynne Haahr, Dr Sarkis Manoukian, Professor Helen Mason and Professor Jacqui Reilly.

'Bed-days and costs associated with the inpatient burdern of healthcare-associated infection in the UK' in the Journal of Hospital Infection. Co-authored by Dr Sarkis Manoukian, Sally Stewart, Professor Helen Mason, Lynne Haahr and Professor Jacqui Reilly.

'Evaluating the post-discharge cost of healthcare-associated infection in NHS Scotland' in the
Journal of Hospital Infection. Co-authored by Dr Sarkis
Manoukian, Sally Stewart, Professor Helen Mason, Lynne
Haahr and Professor Jacqui Reilly.

Find out more about the research groups by visiting the ReaCH website via the link below.

Read more

Small answers to big problems?

Coronary heart disease and diabetes are two of the biggest long-term challenges to global health. Over the last decade, there has been an explosion of interest in understanding changes in the cellular landscape of small non-coding microRNA sequences that regulate gene and protein expression, which may provide new therapies for these diseases. Recently, Richard Lightbody and Jamie Tarlton,



from the laboratory of Professor Ann Graham in the Molecular Mechanism of Long-Term Conditions Research Group, have published new data and comprehensive review articles in this area as part of their PhD studies. Richard addressed the complex area of microRNA sequences, identifying small molecules which were shown to alter inflammation and 'fat' accumulation' within cells in the artery wall.

'MicroRNA sequences modulating inflammation and lipid accumulation in macrophage 'foam' cells: Implications for atherosclerosis' in the World Journal of Cardiology. Co-authored by Richard Lightbody, Dr Janice Taylor, Dr Yvonne Dempsie and Professor Annette Graham.

This work led on to identify a key microRNA molecule which may provide protection against these damaging events.

'Induction of microRNA hsa-let-7d-5p, and repression of HMGA2, contribute protection against lipid accumulation in macrophage 'foam' cells' in BBA Molecular and Cell Biology of Lipids. Co-authored by Richard Lightbody, Dr Janice Taylor, Dr Yvonne Dempsie and Professor Annette Graham.

Jamie's work focused on sequences which modulate the function of insulin-secreting beta cells and published a frontispiece review examining the link between microRNA and 'fat' accumulation in these cells.

'Protection against Glucolipotoxicity by High Density Lipoprotein in Human PANC-1 Hybrid 1.1B4 Pancreatic Beta Cells: The Role of microRNA' in Biology. Co-authored by Jamie Tarlton, Richard Lightbody, Dr Steven Patterson and Professor Annette Graham.

'MicroRNA Sequences Modulated by Beta Cell Lipid Metabolism: Implications for Type 2 Diabetes Mellitus' in Biology. Co-authored by Jamie Tarlton, Dr Steven Patterson and Professor Annette Graham.

Read more

ReaCH Seminar Series

The seminar series started this month with the Molecular Mechanisms of Long-Term Conditions Research Group showcasing their research and strategy in the area of Public Health and Infections with presentations from Professor Linda Scobie, Dr Janice Spencer, Dr John Butcher and Dr Ryan Kean. The seminar was recorded and will be made available shortly via the resources section of the ReaCH website under support for staff. The seminars will be taking place each month and further details will be circulated in due course. In the meantime, a provisional schedule can be viewed on the website via the link below.

Read more

Latest vacancies

Opportunity for a full-time researcher to join the SIREN study. Closing date 27th August.

Part time opportunity to join the team in the Department of Biological and Biomedical Sciences as a research technician. Closing date 31st August.

Opportunity for a full-time researcher to join the NIHR funded project SEQUENCEdigital. Closing date 27th August.

Full-time researcher post in the Department of Biological and Biomedical Sciences. Closing date 26th August.

Read more

If you have any news stories, please contact Janice Burns, Senior Communications Officer Email: janice.burns@gcu.ac.uk